

CLAIMS

1. Iron golf club heads, comprising:
a long metal iron head having a hollow interior, a strike face, a hosel, a sole, a back side, a top line, a toe, a heel, and a loft less than 33° ,
said long metal iron head being formed from a first casing and a second casing,
said first casing having said hosel and said strike face,
said strike face having an average wall thickness,
said second casing having said sole, said back side, said top line, a front side located opposite from said back side, and a cavity as viewed from a direction facing said front side,
said first casing being welded to said second casing such that said cavity defines at least a portion of said hollow interior; and
a short metal iron head having a hollow interior, a strike face, a hosel, a sole, a back side, a top line, a toe, a heel, and a loft of at least 33° ,
said short metal iron head being formed from a third casing and a fourth casing,
said third casing having said hosel and said strike face of said short metal iron head,
said strike face of said short metal iron having an average wall thickness,
said fourth casing having said sole, said back side, and said top line of said short metal iron head,
said fourth casing having a front side located opposite from said back side of said fourth casing,
said fourth casing having a cavity as viewed from a direction facing said front side of said fourth casing,
said third casing being welded to said fourth casing such that said cavity of said fourth casing defines at least a portion of said hollow interior of said short metal iron head,
said average wall thickness of said strike face of said long metal iron head being less than said average wall thickness of said strike face of said short metal iron head.
2. The iron golf club heads of Claim 1,
said strike face of said short metal iron head having a substantially uniform wall thickness across an entirety of said strike face of said short metal iron head,

said strike face of said long metal iron head having a substantially uniform wall thickness across an entirety of said strike face of said long metal iron.

3. The iron golf club heads of Claim 1, said average wall thickness of said strike face of said long metal iron head being less than 3mm.

4. The iron golf club heads of Claim 1, said average wall thickness of said strike face of said long metal iron head being approximately 2.5mm.

5. The iron golf club heads of Claim 1, said average wall thickness of said strike face of said short metal iron head being greater than 2mm.

6. The iron golf club heads of Claim 1, said average wall thickness of said strike face of said short metal iron head being greater than 2.5mm.

7. The iron golf club heads of Claim 1, said average wall thickness of said strike face of said short metal iron head being greater than 3.0mm

8. The iron golf club heads of Claim 1, said average wall thickness of said strike face of said short metal iron head being approximately 2.85mm.

9. The iron golf club heads of Claim 1, said average wall thickness of said strike face of said short metal iron head being approximately 3.5mm.

10. The iron golf club heads of Claim 1,
said average wall thickness of said strike face of said long metal iron head being 2.5mm or less,
said average wall thickness of said strike face of said short metal iron head being greater than 2.5mm.

11. The iron golf club heads of Claim 1,
said first casing and said third casing each being a forged casing,
said second casing and said fourth casing each being a cast casing.
12. The iron golf club heads of Claim 1, said first casing being formed from a first steel, said third casing being formed from a second steel.
13. The iron golf club heads of Claim 1,
said strike face of said first casing having an average hardness between HRC25-42,
said strike face of said third casing having an average hardness between HRB80-HRC20.
14. Iron golf club heads, comprising:
a long metal iron head having a hollow interior, a strike face, a hosel, a sole, a back side,
a top line, a toe, a heel, and a loft less than 33°,
said long metal iron head being formed from a first casing and a second casing,
said first casing having said hosel and said strike face,
said strike face having an average hardness,
said second casing having said sole, said back side, said top line, a front side located
opposite from said back side, and a cavity as viewed from a direction facing said front side,
said first casing being welded to said second casing such that said cavity defines at least a
portion of said hollow interior; and
a short metal iron head having a hollow interior, a strike face, a hosel, a sole, a back side,
a top line, and a loft of at least 33°,
said short metal iron head being formed from a third casing and a fourth casing,
said third casing having said hosel and said strike face of said short metal iron head,
said strike face of said short metal iron having an average hardness,
said fourth casing having said sole, said back side, said top line, said toe, and said heel of
said short metal iron head,
said fourth casing having a front side located opposite from said back side of said fourth
casing,

said fourth casing having a cavity as viewed from a direction facing said front side of said fourth casing,

said third casing being welded to said fourth casing such that said cavity of said fourth casing defines at least a portion of said hollow interior of said short metal iron head,

said average hardness of said strike face of said long metal iron being greater than said average hardness of said strike face of said short metal iron.

15. The iron golf club heads of Claim 14, said average hardness of said strike face of said long metal iron head being between HRC25-42.

16. The iron golf club heads of Claim 14, said average hardness of said strike face of said short metal iron head being between HRB80-HRC20.

17. The iron golf club heads of Claim 14,
said average hardness of said strike face of said long metal iron head being between HRC25-42,
said average hardness of said strike face of said short metal iron head being between HRB80-HRC20.

18. The iron golf club heads of Claim 14,
said first casing and said third casing each being a forged casing,
said second casing and said fourth casing each being a cast casing.

19. The iron golf club heads of Claim 14, said first casing being formed from a first steel, said third casing being formed from a second steel that is different than said first steel.

20. An iron golf club head having a hollow interior, a strike face, a hosel, a sole, a back side, a top line, a toe, and a heel, said iron golf club head comprising:
a first metal casing having said hosel and said strike face; and

a second metal casing having a metallic wall that defines said sole, said back side, said top line, and a front side located opposite from said back side,

said second casing having a first cavity as viewed from a direction facing said back side,
said second casing having a second cavity as viewed from a direction facing said front side,

said first cavity and said second cavity each being elongated and each generally extending in a direction from said heel to said toe,

said first cavity being located above said second cavity as measured with respect to said sole,

said first casing being welded to said second casing such that said second cavity defines at least a portion of said hollow interior of said iron golf club head.

21. The iron golf club head of claim 20, one portion of said metallic wall being substantially normal to said strike face and defining both a side of said first cavity and a side of said second cavity.

22. The iron golf club head of claim 21, said side of said first cavity being a first side, another portion of said metallic wall defining both said sole and a second side of said second cavity located opposite from said first side.

23. The iron golf club head of claim 21, said side of said second cavity being a first side of said second cavity, another portion of said metallic wall defining both said top line and a second side of said second cavity located opposite from said first side of said second cavity.

24. The iron golf club head of claim 20, said metallic wall defining a planar surface at an innermost location within said first cavity.

25. The iron golf club head of claim 20, said first casing having a planar wall that defines said strike face, said planar wall having a periphery, said second casing having an edge that receives said periphery.

26. The iron golf club head of claim 20, said first casing being a forged casing.
27. The iron golf club head of claim 26, said second casing being a cast casing.
28. The iron golf club head of claim 20, said first casing having an average hardness between HRC25-42.
29. The iron golf club head of claim 20, said first casing having an average hardness between HRB80-HRC20.